



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/595,372	04/13/2006	Avner Badehi	06727/0204303-US0	8389
7278	7590	01/25/2008	EXAMINER	
DARBY & DARBY P.C. P.O. BOX 770 Church Street Station New York, NY 10008-0770			COLEMAN, WILLIAM D	
			ART UNIT	PAPER NUMBER
			2823	
			MAIL DATE	DELIVERY MODE
			01/25/2008	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/595,372

Applicant(s)

BADEHI ET AL.

Examiner

W. David Coleman

Art Unit

2823

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 November 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 285-311 is/are pending in the application.
- 4a) Of the above claim(s) 285-288 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 289-308 and 310 is/are rejected.
- 7) ☒ Claim(s) 309 and 311 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 04/6; 08/06.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Election/Restrictions*

1. Applicant's election without traverse of Group II, claims 289-311 in the reply filed on November 5, 2007 is acknowledged.

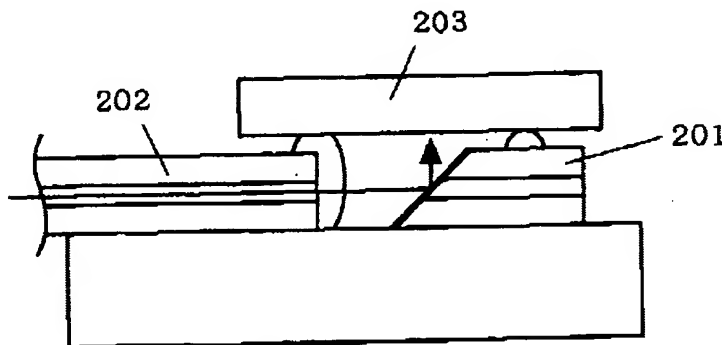
### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 289-308 and 310 are rejected under 35 U.S.C. 102(e) as being anticipated by Korenaga et al., U.S. Patent Application Publication 2003/0118288 A1.
4. Korenaga discloses a optical device as claimed. See **FIGS. 1-20**, where Korenaga teaches the following limitations.



5. Pertaining to claim 289, Korenaga teaches an optical device comprising:

a substrate having first and second generally parallel planar surfaces (i.e., both the top side and bottom side of the substrate are generally planar);

at least one optical fiber **201/202**, having a core, mounted on said substrate and being cut by a transverse notch having at least one inclined surface extending entirely through said core of said at least one inclined surface; and

at least one optical element adhesively mounted at least partially within said notch, said at least one optical element including at least one reflective optical surface facing an end of at least one optical fiber lying at one of said at least one inclined surface.

6. Pertaining to claim 290, Korenaga teaches an optical device according to claim 289 and also comprising electrical circuitry.

7. Pertaining to claim 291, Korenaga teaches an optical device according to claim 289 and wherein said core of said at least one optical fiber is in optical communication with said at least one reflective optical surface.

8. Pertaining to claim 292, Korenaga teaches an optical device according to claim 289 and also comprising electrical circuitry formed on said second surface.

9. Pertaining to claim 293, Korenaga teaches an optical device according to claim 289 and wherein said substrate is optically transmissive, permitting optical signal communication

therethrough between first and second surfaces (please note that Korenaga discloses various embodiments in which the substrate is optically transmissive).

10. Pertaining to claim 294, Korenaga teaches an optical device according to claim 289 and wherein said at least on inclined surface is a rough surface (the Examiner takes the position that the term "rough" is a relative term and fails to breath life into the claim).

11. Pertaining to claim 295, Korenaga teaches an optical device according to claim 294 and also comprising an optical adhesive disposed between said rough surface and said at least one optical element, which fill in interstices of said rough surface.

12. Pertaining to claim 296, Korenaga teaches an optical device according to claim 295 and wherein said optical adhesive has an index of refraction at least generally matched to that of said core of said at least one optical waveguide and to that of said at least one optical element.

13. Pertaining to claim 297, Korenaga teaches an optical device according to claim 289 and wherein said at least one reflective optical surface is a flat reflective surface.

14. Pertaining to claim 298, Korenaga teaches an optical device according to claim 289 and wherein said at least one optical element includes a concave mirror (please note that Korenaga discloses various embodiments, some which include a concave mirror).

15. Pertaining to claim 299, Korenaga teaches an optical device according to claim 289 and wherein said at least one optical element includes a partially flat and partially concave mirror.

16. Pertaining to claim 300, Korenaga teaches an optical device according to claim 299 and wherein said partially concave mirror includes a mirror having multiple concave reflective surfaces (see element 37 of FIG. 4).

17. Pertaining to claim 301, Korenaga teaches an optical device according to claim 289 and wherein said at least one optical element includes a reflective grating (see element 173 of FIG. 17B).

18. Pertaining to claim 302, Korenaga teaches an optical device according to claim 289 and wherein said at least one optical element includes reflective elements formed on opposite surfaces of an optical substrate.

19. Pertaining to claim 303, Korenaga teaches an optical device according to claim 289 and wherein said at least one optical element is operative to focus light received from said at least one optical waveguide.

20. Pertaining to claim 304, Korenaga teaches an optical device according to claim 289 and wherein said at least one optical element is operative to collimate light received from said at least one optical waveguide.

21. Pertaining to claim 305, Korenaga teaches an optical device according to claim 289 and wherein said at least one optical element is operative to focus at least one of multiple colors of light received from said at least one optical waveguide (the Examiner also **OBJECTS** to the present claim limitation because it is well known that light in the most general term is made up of multiple colors or a mixture of various wavelengths. Furthermore because Applicants fail to disclose any particular wavelength there is no possible way to dispute what is taught and what is disclosed and claimed as Applicants invention).

22. Pertaining to claim 306, Korenaga teaches an optical device according to claim 89 and also including an optical connector on an edge of said optical device (please note that the term “edge” is a relative term since all tangible objects have edges).

23. Pertaining to claim 307, Korenaga teaches an optical device according to claim 306 and wherein said optical connector is aligned with at least one end of said at least optical waveguide along said edge of said optical device and also including electrical circuitry and an array of electrical connections coupled to said electrical circuitry.

24. Pertaining to claim 308, Korenaga teaches on optical device according to claim 306 and wherein said optical connector also comprises alignment bores arranged on said edge of said optical device.

25. Pertaining to claim 310, Korenaga teaches an optical device according to claim 289 and also comprising at least one laser mounted on said substrate and at least one optical detector arranged to sense light emitted by said at least one laser.

### ***Objections***

26. Claims 309 and 311 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Conclusion***

27. Any inquiry concerning this communication or earlier communications from the examiner should be directed to W. David Coleman whose telephone number is 571-272-1856. The examiner can normally be reached on Monday-Friday 9:00 AM - 5:30 PM.

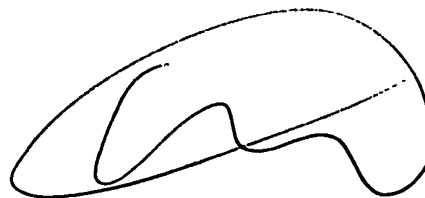
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matt Smith can be reached on 571-272-1907. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Application/Control Number:  
10/595,372  
Art Unit: 2823

Page 8

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read 'W. David Coleman', enclosed within a large, irregular oval shape.

W. David Coleman  
Primary Examiner  
Art Unit 2823

WDC